caBIG cancer Biomedical Informatics Grid

caBIG Compatibility Validation Suite

The case for creating a validation suite for verifying caBIG compatibility

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Validation Suite Rationale

- A validation suite defines clearly what developers need to accomplish to attain compatibility
- The suite can be broken down into tests that are for defined areas, such as vocabulary compliance, data exchange capabilities (supporting discovery and introspection, for instance) and can be refined by each workspace in accordance with the specifics of the problem domain

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Validation Suite Design

- Each level of ‘maturity’ (Bronze, Silver, and Gold) would have a set of defined tests required to achieve validated compliance
- The validation suite would be more than a checklist of features, it would be a series of tests that would verify functionality and adherence to caBIG design principles

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Validation Suite Design II

- Some of the compatibility modules, such as Interface Integration, might be have identical tests across all workspaces, but other areas may have additional tests for compliance, such as inclusion of adverse event vocabularies like CTC 3.0 for an adverse event module

Validation Suite Benefits

Although the creation of the validation suite requires additional effort and thought in each workspace, the benefits include:

- A ‘level playing field’ for all software providers
- A clear spec against which to write code
- The ability to write code that conforms to the ‘spirit’ of caBIG regardless of platform or development environment
- Providing a fair, unambiguous metric against which to measure (and validate) compatibility
- Encourages the use of modern ‘test first’ software methodologies